

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A holographic recording medium comprising, in a substantially identical plane,
a single recording layer comprising a holographic recording material
sandwiched from both sides by two substrates having an uneven shape including a step in thickness; and
~~a recording~~the single recording layer having a white-light reconstruction holographic recording layer region and a Fourier holographic recording layer region,
the white-light reconstruction holographic recording layer region being capable of forming a white-light reconstruction hologram and having a thickness of 2 μm to 80 μm ,
the Fourier holographic recording layer region being capable of multiplexed hologram recording and having a thickness of 100 μm to 2 cm, and
the thickness of each of the white-light reconstruction holographic recording layer region and Fourier holographic recording layer region being changed by the step height of the two substrates.
2. (Original) The holographic recording medium according to claim 1, wherein the white-light reconstruction holographic recording layer region is 3 μm to 40 μm thick, and the Fourier holographic recording layer region is 100 μm to 5 mm thick.
3. (Currently Amended) A holographic recording medium comprising, in a substantially identical plane,

a single recording layer comprising a holographic recording material
sandwiched from both sides by two substrates having an uneven shape including a step in thickness; and

~~a recording~~the single recording layer having a white-light reconstruction
holographic recording layer region and a Fourier holographic recording layer region,

the white-light reconstruction holographic recording layer region having a thickness of 2 μm to 80 μm and a white-light reconstruction hologram being formed in at least a part of the white-light reconstruction holographic recording layer region,

the Fourier holographic recording layer region having a thickness of 100 μm to 2 cm and multiplexed holograms being recorded in at least a part of the Fourier holographic recording layer region, and

the thickness of each of the white-light reconstruction holographic recording layer region and Fourier holographic recording layer region being changed by the step height of the two substrates.

4. (Original) The holographic recording medium according to claim 3, wherein the white-light reconstruction holographic recording layer region is 3 μm to 40 μm thick, and the Fourier holographic recording layer region is 100 μm to 5 mm thick.

5. (Original) The holographic recording medium according to claim 3, wherein a hologram formed in the white-light reconstruction holographic recording layer is a reflection hologram.

6. (Original) The holographic recording medium according to claim 4, wherein a hologram formed in the white-light reconstruction holographic recording layer is a reflection hologram.

7-8. (Canceled)

9. (Previously Presented) A method of holographic recording comprising the step of irradiating, as an object beam, a two-dimensional pattern image created by a spatial light modulator to a white-light reconstruction holographic recording layer region in a holographic recording medium comprising, in a substantially identical plane, the white-light reconstruction holographic recording layer region capable of forming a white-light reconstruction hologram, having a thickness of 2 μm to 80 μm , and a Fourier holographic recording layer region capable of multiplexed hologram recording, having a thickness of 100 μm to 2 cm, the object beam is modulated by the spatial light modulator, is switched to an optical path different from an optical path used for irradiating the two-dimensional pattern image, is Fourier-transformed, and then is irradiated as an information beam to the Fourier holographic recording layer region in the holographic recording medium.

10. (Previously Presented) The method of holographic recording according to claim 9, wherein the white-light reconstruction holographic recording layer region is 3 μm to 40 μm thick, and the Fourier holographic recording layer region is 100 μm to 5 mm thick in the holographic recording medium.